IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1-22. (Canceled).

23. (New) A wireless communication apparatus comprising:

a subcarrier number determining section that determines the number of subcarriers to allocate to every communicating party;

a first transmission section that transmits information about the number of subcarriers determined in the subcarrier number determining section, to said every communicating party; and

an allocation control section that selects subcarriers to allocate transmission data for said every communicating party based on channel quality information of the number of subcarriers for said every communicating party extracted from a received signal,

wherein, when a sum of the amount of data of the channel quality information about the subcarriers selected by the communicating party and the amount of subcarrier identification information indicating the subcarriers selected by the communicating party is larger than the amount of data of channel quality information about all subcarriers in a communication band, the subcarrier number determining section determines the number of said all subcarriers in the communication band as the number of subcarriers to allocate to the communicating party.

24. (New) The wireless communication apparatus according to claim 23, wherein the

subcarrier number determining section determines the number of subcarriers to allocate to said every communicating party to achieve a required transmission rate of said every communicating party or more.

25. (New) The wireless communication apparatus according to claim 23, wherein:

the subcarrier determining section determines the number of subcarriers for a communicating party by multiplying the number of subcarriers allocated to the communicating party by the allocation control section in one frame previous to a current frame, by a predetermined constant; and

the first transmission section transmits, in the current frame, information about the number of subcarriers determined in the subcarrier number determining section.

26. (New) The wireless communication apparatus according to claim 23, wherein the subcarrier number determining section determines the number of subcarriers in accordance with equation (1) :

$$S_k = \lceil \alpha \times R_k / r \rceil \quad \ldots (1)$$

where S_k: the number of subcarriers (where k is a user number that is a natural number of 2 or more) ,

α: a first constant,

R_k: a required transmission rate of communicating party (where k is a user number that is a natural number of 2 or more),

r: a transmission rate for one subcarrier while employing modulation coding schemes

having a highest transmission rate or a transmission rate for one subcarrier while using modulation coding schemes satisfying a required packet error rate using a channel quality value of a value that is a sum of an average signal to noise ratio and a second constant, and

$\lceil \alpha \times R_k / r \rceil$: a minimum integer equal to or larger than $(\alpha \times R_k / r)$.

27. (New) The wireless communication apparatus according to claim 23, wherein the subcarrier number determining section determines the number of subcarriers in accordance with equation (2) :

$$S_k = \lceil (\beta \times R_k \times N) / (R_1 + R_2 + \cdots + R_k) \rceil \quad \ldots \quad (2)$$

where S_k: the number of subcarriers (where k is a user number that is a natural number of 2 or more) ,

β: a constant,

R_k ; a required transmission rate of the communicating party (where k is a user number that is a natural number of 2 or more)

N: a total number of subcarriers, and

$\lceil (\beta \times R_k \times N) / (R_1 + R_2 + \cdots + R_k) \rceil$: a minimum integer equal to or larger than $((\beta \times R_k \times N) / (R_1 + R_2 + \cdots + R_k))$.

28. (New) A communication terminal apparatus that communicates with the wireless communication apparatus according to claim 23, the communication terminal apparatus comprising:

a subcarrier selection section that selects subcarriers of the number of subcarriers in order of good reception quality using information about the number of subcarriers extracted from a received signal;

a channel quality information generating section that generates the channel quality information of the subcarriers selected in the subcarrier selection section; and

a second transmission section that transmits the channel quality information generated in the channel quality information generating section.

29. (New) A base station apparatus comprising the wireless communication apparatus according to claim 23.

30. (New) A subcarrier allocation method comprising the steps of:

determining the number of subcarriers to allocate to every communicating party;

transmitting information about the number of subcarriers determined in the step of determining the number of the subcarriers, to said every communicating party; and

selecting subcarriers to allocate transmission data for said every communicating party based on channel quality information of the number of subcarriers for said every communicating party extracted from a received signal,

wherein, in the step of determining the number of subcarriers to allocate to said every communicating party, when a sum of the amount of data of the channel quality information about the subcarriers selected by the communicating party and the amount of subcarrier identification information indicating the subcarriers selected by the communicating party is larger than the

amount of data of channel quality information about all subcarriers in a communication band, the number of said all subcarriers in the communication band is determined as the number of subcarriers to allocate to the communicating party.

31. (New) The subcarrier allocation method according to claim 30, wherein, in the step of determining the number of subcarriers to allocate to said every communicating party, the number of subcarriers to allocate to said every communicating party is determined to achieve a required transmission rate of said every communicating party or more.

32. (New) The subcarrier allocation method according to claim 30, wherein:

the number of subcarriers for a communicating party is determined by multiplying the number of subcarriers to allocate to the communicating party in one frame previous to the current frame, by a predetermined constant; and

information about the determined number of subcarriers is transmitted in the current frame.